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	Application No.	Applicant(s)
	10/647,946	LONG ET AL.
Notice of Allowability	Examiner	Art Unit
	Mahmoud Gimie	3747
The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this applied or other appropriate communication IGHTS. This application is subject to	plication. If not included will be mailed in due course. THIS
1. $\boxtimes$ This communication is responsive to <u>amendment filed on a second second</u>	<u>8/8/05</u> .	
2.  The allowed claim(s) is/are <u>1-7,9-17,21 and 22</u> .		
3. ☐ Acknowledgment is made of a claim for foreign priority up a) ☐ All b) ☐ Some* c) ☐ None of the:		
<ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>		
Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv		
5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) I including changes required by the Notice of Draftspers	son's Patent Drawing Review ( PTO-	948) attached
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner' Paper No./Mail Date	s Amendment / Comment or in the C	Office action of
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the same of		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. Notice of Informal F	Patent Application (PTO-152)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summary	(PTO-413),
3. Information Disclosure Statements (PTO-1449 or PTO/SB/	Paper No./Mail Da 08), 7. ⊠ Examiner's Amend	
Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit	8. Examiner's Stateme	ent of Reasons for Allowance
of Biological Material	9.	

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## **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney J. Gordon Lewis on 9/15/05.

The application has been amended as follows:

Claim 12, line 7, before "a differentially" -- A second circuit including-- has been inserted.

Claim 12, line 10, after "temperatures" -- of-- has been inserted.

The following is an examiner's statement of reasons for allowance: The primary reason for allowance of claims 1,12, 21 and 22 is the inclusion of the limitations of

"A resistor thermally coupled to said die and configured to receive a load current resulting from production of said drive signal, said resistor generating heat resulting from dissipating said load current; a second circuit producing an output voltage proportional to a difference between an operating temperature of the die adjacent said resistor and a reference temperature of the die at a location spaced from said resistor; and a third circuit responsive to said output voltage to disable said first control signal,

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and thereby disable said drive signal, if said output voltage exceeds a reference voltage." in claim 1;

"A resistor thermally coupled to said die and configured to receive a load current resulting from production of said drive signal, said resistor generating heat resulting from dissipating said load current; a second circuit including a differentially connected transistor pair including a first transistor positioned adjacent to said resistor and a second transistor positioned remote from said resistor, said transistor pair producing an output signal proportional to a difference in operating temperatures said die at respective locations of said first and second transistors; and a third circuit responsive to said output signal to disable said first control signal, and thereby disable said drive signal, if a magnitude of said output signal exceeds a reference magnitude" in claim 12;

"Wherein said third circuit includes a comparator having a first input receiving said

Output voltage, a second output receiving a reference voltage and a comparator output,
said comparator output switching from a first logic level to a second logic level when
said output voltage exceeds said reference voltage, and wherein said third circuit further
includes a latch having a first input connected to said comparator output, a second input
receiving an inverted representation of a second control signal and a latch output, said
latch output switching from a first state to a second state when said second control
signal is at a predefined logic state and said comparator output switches from said first

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logic level to said second logic level." in claims 21 and 22 that the prior art of record neither taught nor suggested.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahmoud Gimie whose telephone number is 571-272-4841. The examiner can normally be reached on Tuesday-Friday between 7 a.m. -3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on 571-272-4856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9/15/05

MG